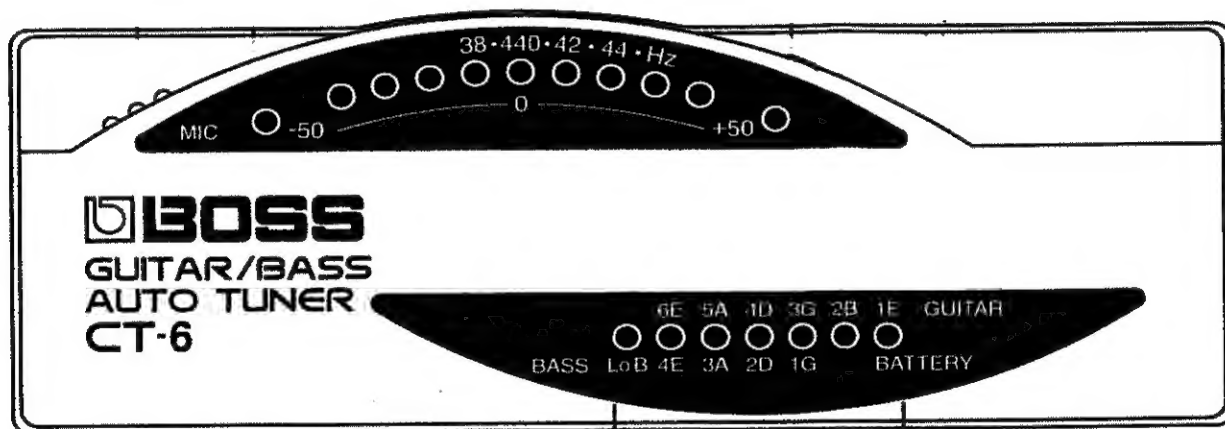


# CT-6 GUITAR/BASS AUTO TUNER

Owner's Manual



# CT-6 GUITAR/BASS AUTO TUNER



## Owner's Manual

Thank you, and congratulations on your choice of the BOSS CT-6 Guitar/Bass Auto Tuner. Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES". These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, this manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.







## USING THE UNIT SAFELY

### INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

#### About WARNING and CAUTION Notices







 <b>WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 <b>CAUTION</b>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly.  * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

#### About the Symbols






	The  symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

### ALWAYS OBSERVE THE FOLLOWING

#### WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual. 
- Do not open (or modify in any way) the unit or its AC adaptor. 
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your dealer, or qualified Roland service personnel. 
- Never use or store the unit in places that are: 
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. 
- Use only the specified AC adaptor (PSA-Series), and make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock. 

#### WARNING

- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged. 
- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist. 
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit. 
- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your dealer or qualified Roland service personnel when: 
  - The AC adaptor or the power-supply cord has been damaged; or
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 

## IMPORTANT NOTES

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In addition to the items listed under "USING THE UNIT SAFELY", please read and observe the following:

### Power Supply: Use of Batteries

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.

### Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an

- When installing or replacing batteries, always turn off the power on this unit and disconnect any other devices you may have connected. This way, you can prevent malfunction and/or damage to speakers or other devices.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.

### Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.

- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

### Additional Precautions

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting/disconnecting all cables, grasp the connector itself—never pull on the cable. This

way you will avoid causing shorts, or damage to the cable's internal elements.

- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

# Panel Descriptions

## Internal Microphone

Used when tuning acoustic instruments. (Place the CT-6 close to the instrument or vice versa.)

\* The internal microphone will not function when an instrument has been connected to the Input Jack.

## Pitch Indicators

These show you the pitch difference between the input sound and the string name (string name indicators) actually indicated. If the center (green) of the Pitch indicators is lit, there is no pitch difference.

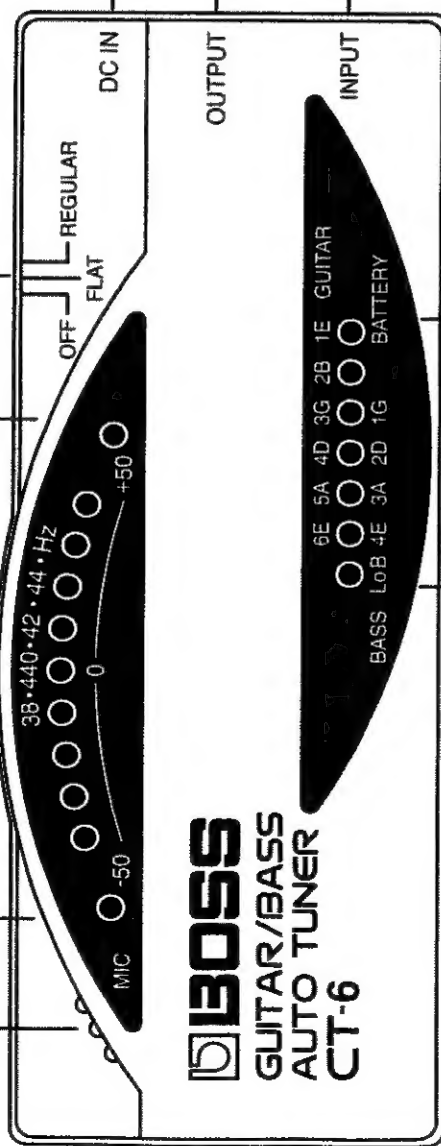
## Power/Mode Selection Switch

This switch serves two purposes; it turns the power ON/OFF, and provides selection of the operating mode: REGULAR or FLAT. For normal tuning, select REGULAR. Select FLAT for tuning that is lowered by a semitone.

## AC Adaptor Jack

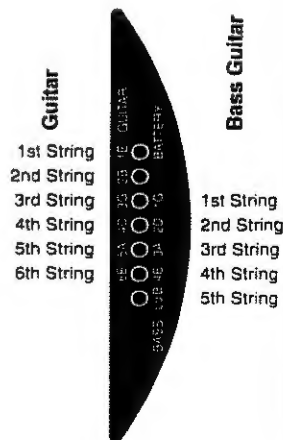
Accepts connection of an AC adaptor (BOSS PSA-Series; optional).

\* If there are batteries in the unit while an AC adaptor is being used, normal operation will continue should the line voltage be interrupted (power blackout or power cord disconnection).



## String Name Indicators

These show the string names of the input sound. With a guitar, the string names are indicated by the six indicators "6E-1E," while with a bass guitar, the string names are shown with the four indicators "4E-1G." The fifth string of a five-string bass guitar is shown with the "LoB" indicator (green).



## Output Jack

Provides output of the signals produced by the instrument connected to the Input jack.

## Input Jack

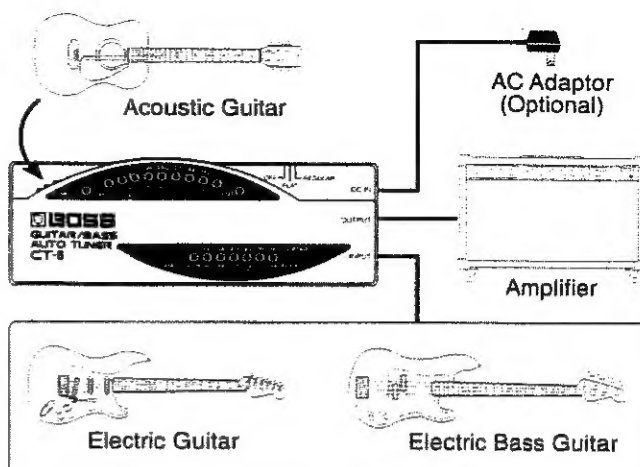
Connect the instrument you wish to tune to this jack.

## Features

- The BOSS CT-6 tuner allows you to quickly and easily tune either an electric guitar or an electric bass guitar.
- This tuner can be used for flat tuning.
- Reads over a wide range—even works well with five-string bass guitars.
- A highly sensitive on-board microphone allows you to tune acoustic guitars as well.
- When you change the reference pitch, you can monitor it with the Pitch indicators.

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## Making the Connections



*\* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.*

## Tuning Procedure

The CT-6 automatically shows the string name depending on the input sound. Normally, tune in the Regular Tuning mode.

### 1. Set the Power/Mode switch to "REGULAR."

### 2. Connect your instrument to the Input jack.

If you wish to tune an acoustic instrument, you will need to use the internal microphone. Place the CT-6 close to the instrument (or vice versa).

### 3. Play single notes on the instrument.

The string (note) name closest to the input note will be indicated by the String Name indicator. Additionally, the amount by which the input note differs in pitch from the indicated string (note) name can be checked by viewing the Pitch indicators.



### 4. Tune the instrument.

First, get the string name indicator for the string you wish to tune to light, then tune so that the center (green) of the Pitch indicators will be lit (Given a reference pitch of A = 440 Hz).



## Flat Tuning

Flat tuning is a semitone below standard tuning. The LED display will still show the notes as if it were standard tuning, but the absolute pitch will be a half-step lower. This makes it easier to tune and play in flat keys.

1. Set the Power/Mode switch to "FLAT."
2. Tune the same way as for any normal string.

## Changing the Reference Pitch

Reference Pitch refers to the frequency of note A4 (on a piano, the key at the center of the keyboard) on the instrument that will provide the predominate tonal focus of a performance (such as the piano). You should tune all instruments so they are in tune with this Reference Pitch. The CT-6 allows you to tune by shifting the reference pitch.

Tune each string so that the pitch indicator that corresponds to the reference pitch (A = 438 – 445 Hz, in 1 Hz steps) will be lit.

**Example:** Tune each string so that the Pitch indicators will be lit as shown below.

To set the reference pitch to 438 Hz



To set the reference pitch to 440 Hz (normal use)



To set the reference pitch to 443 Hz



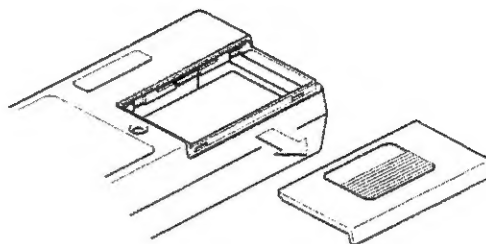
## Battery Check

When the batteries become exhausted, the Battery indicator (1E) will flash and the unit can no longer tune properly. If this happens, replace them with a new set.



## Changing the Battery

1. Press down and slide off the lid of the battery compartment (located on the bottom of the unit).
2. Remove the old battery from the compartment and disconnect the snap cord.
3. Connect the snap cord to the new battery.
4. Place the new battery inside the compartment and slide the lid back into place.



## Specifications

CT-6: Guitar/Bass Auto Tuner

### Tuning Range

A#0 (29.1 Hz) – B7 (3951 Hz)

Guitar: 6E (82.4 Hz) / 5A (110.0 Hz) / 4D (146.8 Hz) /  
3G (196.0 Hz) / 2B (246.9 Hz) / 1E (329.6 Hz)

Bass: LoB (30.9 Hz) / 4E (41.2 Hz) / 3A (55.0 Hz) /  
2D (73.4 Hz) / 1G (98.0 Hz)

### Tuning Accuracy

+/-3 cent

### Input Impedance

1 M $\Omega$

### Switch

Power/Mode Selection Switch

### Indicators

Pitch Indicators (11 points), String Name Indicators (7 points)

### Jacks

Input Jack, Output Jack, AC Adaptor Jack

### Power Supply

Dry Battery S-006P/6F22 (9 V)

AC Adaptor (PSA-Series; Optional)

### Current Draw

16 mA

*\* Expected battery life under continuous use:*

*Carbon: 8 hours*

*These figures will vary depending on the actual conditions of use.*

### Dimensions

140 (W) x 52 (D) x 25 (H) mm

5-9/16 (W) x 2-1/16 (D) x 1 (H) inches

### Weight

135 g / 5 oz (including battery)

### Accessories

Dry Battery S-006P/6F22 (9 V), Owner's Manual

### Option

PSA-Series (AC Adaptor)

*\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

For Canada

### CLASS B

### NOTICE





This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

### CLASSE B





### AVIS

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites par le ministère canadien des Communications.









### **WARNING**

- Protect the unit from strong impact. (Do not drop it!) 
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through. 
- Before using the unit in a foreign country, consult with your dealer, or qualified Roland service personnel. 
- Batteries must never be recharged, heated, taken apart, or thrown into fire or water. 

### **CAUTION**

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation. 
- Always grasp only the plug or the body of the AC adaptor when plugging into, or unplugging from, an outlet or this unit. 
- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 

### **CAUTION**

- Never climb on top of, nor place heavy objects on the unit. 
- Never handle the AC adaptor body, or its plugs, with wet hands when plugging into, or unplugging from, an outlet or this unit. 
- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices. 
- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet. 
- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet. 
- If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions. 
- Remove the batteries whenever the unit is to remain unused for an extended period of time. 
- If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. If any of the discharge from the battery has gotten onto your hands or skin, make sure to wash the area thoroughly with water.
- Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.
- Used batteries must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live. 



This product complies with the requirements of European Directive 89/336/EEC.

For Europe

## **FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment. This equipment requires shielded interface cables in order to meet FCC class B Limit.

For the USA





Please note that although a battery was installed in your CT-6 when it was shipped from the factory, it has not been connected. You will need to refer to the section "Changing the Battery," for instructions on connecting the battery.

## Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

### ARGENTINA

Instrumentos Musicales S.A.  
Florida 638  
1005 Buenos Aires  
ARGENTINA  
TEL: (01) 394 4029

### BRAZIL

Roland Brasil Ltda.  
R. Coronel Octaviano da Silveira  
203 05322-010  
Sao Paulo BRAZIL  
TEL: (011) 843 9377

### CANADA

Roland Canada Music Ltd.  
(Head Office)  
5480 Parkwood Way Richmond  
B.C. V6V 2M4 CANADA  
TEL: (604) 270 6626

### Roland Canada Music Ltd.

(Toronto Office)  
Unit 2, 109 Woodbine Downs  
Blvd., Etobicoke, ON  
M9W 6Y1 CANADA  
TEL: (416) 213 9707

### MEXICO

Casa Veeerkamp, s.a. de c.v.  
Av. Toluca No. 323 Col. Olivar de  
los Padres 01780 Mexico D.F.  
MEXICO  
TEL: (525) 668 04 80

### La Casa Wagner de

Guadalajara s.a. de c.v.  
Av. Corona No. 202 S.J.  
Guadalajara, Jalisco Mexico  
C.P. 44100 MEXICO  
TEL: (03) 613 1414

### PANAMA

Productos Superiores, S.A.  
Apartado 685 - Panama 1  
REP. DE PANAMA  
TEL: 26 3322

### U. S. A.

Roland Corporation U.S.  
7201 Dominion Circle  
Los Angeles, CA. 90040-3696,  
U. S. A.  
TEL: (0213) 685 5141

### VENEZUELA

Musiland Digital C.A.  
Av. Francisco de Miranda  
Centro Parque de Cristal, Nivel  
C3 Local 20 Caracas  
VENEZUELA  
TEL: (02) 285 9218

### AUSTRALIA

Roland Corporation  
Australia Pty. Ltd.  
38 Campbell Avenue  
Dee Why West NSW 2089  
AUSTRALIA  
TEL: (02) 962 8266

### NEW ZEALAND

Roland Corporation (NZ) Ltd.  
97 Mt. Eden Road, Mt. Eden,  
Auckland 3, NEW ZEALAND  
TEL: (09) 3098 715

### HONG KONG

Tom Lee Music Co., Ltd.  
Service Division  
22-32 Fan Shan Street, Tsuen  
Wan, New Territories,  
HONG KONG  
TEL: 2415 0911

### INDONESIA

PT Galestra Inti  
Kompleks Perkantoran  
Duta Merlin Blok E No. 7  
Jl. Gajah Mada No. 3-5,  
Jakarta 10130,  
INDONESIA  
TEL: (021) 6335416

### KOREA

Cosmos Corporation  
Service Station  
2nd Floor Nak-Won Arcade  
Jung-Ro. K., Seoul, KOREA  
TEL: (02) 742 8644

### MALAYSIA

Bentley Music SDN BHD  
No. 142, Jalan Bukit Bintang 55100  
Kuala Lumpur, MALAYSIA  
TEL: (03) 2433333

### PHILIPPINES

G.A. Yupangco & Co., Inc.  
339 Gilj, Puyat Avenue  
Makati, Metro Manila 1200,  
PHILIPPINES  
TEL: (02) 399 9801

### SINGAPORE

Swee Lee Company  
BLOCK 231, Bain Street #03-23  
Bras Basah Complex,  
SINGAPORE 0718  
TEL: 3767966

### CRISTOFORI MUSIC PTE

LTD  
335, Joo Chiat Road SINGAPORE  
1542  
TEL: 3450435

### TAIWAN

Siruba Enterprise (Taiwan)  
Co., LTD.  
Room 5, 9th. No. 112 Chung Shan  
N. Road Sec. 2 Taipei, TAIWAN,  
R.O.C.  
TEL: (02) 561 3334

### THAILAND

Theera Music Co., Ltd.  
330 Verg Nakorn Kasem, Soi 2,  
Bangkok 10100, THAILAND  
TEL: (02) 22 18521

### BAHRAIN

Moon Stores  
Red Al Bahrain Road,  
P.O. Box 20077  
State of BAHRAIN  
TEL: 211 005

### IRAN

TARADIS  
Mr Emad Ave. No. 15, 10th street  
P. O. Box 15875/4171 Teheran,  
IRAN  
TEL: (021) 875 6524

### ISRAEL

Hallit P. Greenspoon &  
Sons Ltd.  
8 Reizit Ha aliya Hashnya St  
Tel Aviv-Yafo ISRAEL  
TEL: (03) 6823666

### JORDAN

AMMAN Trading Agency  
Prince Mohammed St. P. O. Box  
825 Amman 11118 JORDAN  
TEL: (06) 641200

### KUWAIT

Easa Husain Al-Yousifi  
P.O. Box 126 Safat 13002  
KUWAIT  
TEL: 5719499

### LEBANON

A. Chahine & Fils  
P.O. Box 16-5857 Gorgi Zeidan St.  
Chahine Building, Achrafieh  
Beirut, LEBANON  
TEL: (01) 335799

### OMAN

OHI Electronics & Trading  
Co. LLC  
P. O. Box 589 Muscat  
Sultanate of OMAN  
TEL: 706 010

### QATAR

Badie Studio & Stores  
P.O. Box 62,  
DOHA QATAR  
TEL: 423554

### SAUDI ARABIA

SAF Music Center  
Al-Khobar 31952, P. O. Box 1366  
SAUDI ARABIA  
TEL: (03) 898 3311

### Abdul Latif S. Al-Ghamdi

Trading Establishment  
Middle East Commercial Center  
Al-Khobar Dharan Highway  
W/hamood St.  
P. O. Box 3631 Al-Khobar  
31952 SAUDI ARABIA  
TEL: (03) 898 2332

### SYRIA

Technical Light & Sound  
Center  
Khaled Ebn Al Walid St.  
P.O. Box 13520  
Damascus - SYRIA  
TEL: (011) 2235 384

### TURKEY

Barkat Sanayi ve Ticaret  
Siraselvier Cad. Guney Ishani No.  
86/8 Taksim, Istanbul TURKEY  
TEL: (0212) 2499324

### U.A.E

Zak Electronics & Musical  
Instruments Co.  
Zabeel Road, Al Sheroq Bldg.  
No. 14, Grand Floor DUBAI  
U.A.E.  
P.O. Box 8050 DUBAI, U.A.E.  
TEL: (04) 360715

### EGYPT

Al Fanny Trading Office  
9, Ebn Hagar Al Askalani Street,  
And El Geff, Heliopolis, Cairo,  
11341 EGYPT  
TEL: (02) 4171628  
(02) 4185531

### MAURITIUS

Philanne Music Center  
4th, Floor Noll. Happy World  
House Sir William Newton Street  
Port Louis MAURITIUS  
TEL: 242 2986

### REUNION

FO - YAM Marcel  
25 Rue Jules MermanZL  
Chaudron - BP79 97491  
Ste Clotilde REUNION  
TEL: 28 29 16

### SOUTH AFRICA

That Other Music Shop  
(PTY) Ltd.  
11 Melle Street (Cnr Melle and  
Juta Street)  
Braamfontein 2001  
Republic of SOUTH AFRICA  
TEL: (011) 403 4105

### Paul Bothner (PTY) Ltd.

17 Wendmuller Centre Claremont  
7700  
Republic of SOUTH AFRICA  
TEL: (021) 64 4030

### AUSTRIA

E. Demalte & Co.  
Neu-Rain Siemens-Strasse 4  
A-6040 Innsbruck P.O. Box 83  
AUSTRIA  
TEL: (0512) 26 44 260

### BELGIUM/HOLLAND/

### LUXEMBOURG

Roland Benelux N. V.  
Houtstraat 1 B-2260 Oevel  
Westerlo BELGIUM  
TEL: (014) 575811

### BELOARUSSIA

TUSHE  
UL. Mogilovskaya 4/4/145  
230001 MINSK  
TEL: (0172) 252-039

### CYPRUS

Radex Sound Equipment Ltd.  
17 Diogenou St., P.O. Box 2046,  
Nicosia CYPRUS  
TEL: (02) 433 426  
(02) 496 423

### DENMARK

Roland Scandinavia A/S  
Langebrogade n Post Box 1937  
DK-1023 Copenhagen K.  
DENMARK  
TEL: 32 95 3111

### FRANCE

Guillard Musiques Roland  
ZAC de Rouange Les Echets 01700  
MIRBEL FRANCE  
TEL: 7226 5060

### Guillard Musiques Roland

(Paris Office)  
1923 rue Labn Geoffroy 94400  
VITRY-SUR-SEINE FRANCE  
TEL: (1) 4680 86 62

### FINLAND

Roland Scandinavia As,  
Filial Finland  
Lauttasareentie 54 B  
Fin-00201 Helsinki, FINLAND  
P.O. Box No. 109  
TEL: (0) 682 4020

### GERMANY

Roland Elektronische  
Musikinstrumente  
Handelsgesellschaft mbH.  
Oststrasse 96, 22644 Nonnenstedt,  
GERMANY  
TEL: (040) 32 60090

### GREECE

V. Dimitriadis & Co. Ltd.  
20, Alexandros St. & Bouboulinas  
54 St. 106 82 Athens, GREECE  
TEL: (01) 8232413

### HUNGARY

Intermusica Ltd.  
Warehouse Area "DEPO" H-33  
H-2046 Torokbalint, HUNGARY  
TEL: (23) 338 041

### IRELAND

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